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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/088,292      | 03/15/2002  | Neville John Freeman | 13485.0004.NPUS00   | 1165             |

26004 7590 10/24/2003

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| EXAMINER |
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DUVERNE, JEAN F

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2839

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/088,292

Applicant(s)

FREEMAN ET AL.

Examiner

Jean F. Duverne

Art Unit

2839

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-8, 10, 17-19 and 24 is/are rejected.
- 7) ☒ Claim(s) 9, 11-16, 20-23, 26 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8, 10, 17-19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okubo (US patent 5,641,230).

In regard to claims 1-2, 5-7, 17-19, and 24, Okubo's device discloses an optical component (figs 1, 3) for use in sensing, said device comprising: an optical assembly adapted to mount optical component so as to define a longitudinal path through the device (figs 1, 3) in which the planar optical component is effectively exposed in free space and including guiding means or waveguide (8) for correlating along said longitudinal path the position along the channel (6,7) of said optical component and of a source of electromagnetic radiation, whereby to expose optical component to said electromagnetic radiation along said longitudinal path whilst substantially eliminating stray electromagnetic radiation by using the cavity and the channels (6,7), wherein the optical assembly comprises a cavity at the channel (6,7) which permits access to a face of the optical component or to a face of a base with which the optical component is in intimate thermal contact whereby to enable an inner temperature controller at 3 to be positioned in thermal contact with the optical component for controlling the temperature of the optical component; the use of inner Peltier assembly at 13. Although the housing

Art Unit: 2839

is planar, Okubo's device fails to explicitly disclose the shape of the optical component. It would have been obvious matter of design choice to meet system design requirement to the optical component with planar shape, since such modification would have involved a mere change in shape of a component. A change in shape is generally within the skill of art. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1976). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the optical component with the planar shape in order meet the system design and requirement in Okubo's device.

In regard to claims 3-4, Okubo's device discloses the aforementioned limitations, but fails to explicitly disclose the shape of the inner Peltier. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 1976). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the inner Peltier with the planar shape in order meet the system design and requirement in Okubo's device.

In regard to claim 8, Okubo's device discloses the aforementioned limitations, but fails to disclose the material used. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the conductive sleeve made with copper heat shroud in order meet the system design and requirement of the system. In re Leshin, 125 USPQ 416. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the conductive sleeve

Art Unit: 2839

made with copper heat shroud in order meet the system design and requirement in Okubo's device.

In regard to claim 10, Okubo's device discloses the aforementioned limitations, but fails to disclose the heat shroud being made integrally with the laser module holder. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the heat shroud being made integrally with the laser module heat shroud, since it has been held that forming in one piece article which has formerly formed in two pieces and put together involve only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the shroud being made integrally with the laser module holder in order reduce the assembling cost the system in Okubo's device.

### ***Conclusion***

#### ***Allowable Subject Matter***

2. Claims 9, 11-16, 20-23, and 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose the combination features the retaining sleeve added outwardly of the heat shroud to force the Peltier exhaust assembly onto the inner Peltier assembly at the first end and the exhaust plate at the other, permit the thermal transfer from the side of the inner

Art Unit: 2839

Peltier to the environment, and the copper heat shroud proved with an opening to coincide with the cavity in the optical assembly allowing the inner Peltier to be inserted in optical assembly after the optical assembly has been inserted in the conducting sleeve with the rest of the claims limitations.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean F. Duverne whose telephone number is (703) 872-9306. The examiner can normally be reached on 9:30-8:00, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JFD

10/18/2003



Jean Frantz Duverne  
Primary Examiner  
Art Unit 2839